# General Aviation Private Pilot Survey / Designated Pilot Examiner Program Assessment

Carla Hackworth, Ph.D.
Cristina Bates
Kali Holcomb, A. A.
Cristy Detwiler, B. A.
Civil Aerospace Medical Institute
Oklahoma City, OK

In order to meet objective 2 of the FAA Flight Plan, the FAA's General Aviation and Commercial Division (AFS-800) plans to improve the Designated Pilot Examiner (DPE) program. A DPE administers a practical test to evaluate a pilot's knowledge and skill to perform a flight maneuver. Problems arise when the application of DPE test criteria vary between examinations, examiners, or examinees. Two surveys will be conducted to determine the effectiveness of the examiner oversight program. One survey will be administered to all newly certified general aviation single-engine-land private pilots. In order to provide a balanced perspective of the practical test standard process of single-engine-land certification, we will also give DPEs the opportunity to comment on the process.

#### INTRODUCTION

In October 2004, the General Accounting Office released a report that was critical of the FAA's designee programs. FAA Flight Standards Service (AFS) is responsible for effective oversight of the Designated Pilot Examiner Program. Flight Standards District Offices (FSDO) provide direct oversight for this program. The FSDOs maintain DPE records, current Vital Information System data, and ensure compliance with other pertinent FAA policy orders. They must also ensure that DPEs conform to the pilot certification requirements of 14 CFR part 61 and the Practical Test Standards. DPEs conduct over 95% of all pilot practical tests.

Any appropriately qualified airman may apply to the FAA for designation. Any pilot examiner may, as authorized by his/her designation, accept applications for the practical tests necessary for issuing pilot certificates and ratings under 14 CFR Part 61. The examiner then conducts those tests and can issue pilot certificates and ratings to qualified applicants.

Ensuring that DPEs are providing complete and thorough practical tests to pilots is one of the many safeguards in place to maintain general aviation safety. That is, initially, flight instructors teach pilots the necessary knowledge and skills for safe flight operations. Following a

demonstration of proficiency to their instructor, pilots must then demonstrate these skills to a designee of the FAA via a practical test. It is critical that DPEs are consistent in their test criteria across applicants. Additionally, DPEs must test all required elements of the practical test in compliance with FAA requirements. Unfortunately, this has not been found to be the case in all circumstances.

The FAA's Southwest Region found inconsistencies between FAA policy orders and part 61 requirements, on the one hand, and reported DPE practice on the other. Questionnaires sent to newly certified private pilots revealed that some applicants received incomplete practical tests. For example, respondents reported that examiners were repeating questions that were answered incorrectly by the pilots. Also, examiners were allowing the repetition of maneuvers that were performed poorly. Both of these actions do not conform to the Practical Test Standards.

Our purpose is to assess the extent to which the test criteria used by DPEs are in compliance with the pilot certification requirements of 14 CFR part 61 and the Practical Test Standards. Additionally, we will examine the consistency between examinations and examiners. To accomplish the research objectives, a general aviation private pilot national survey will be admin-

istered to all recently certified general aviation pilots across the United States. It is essential that newly certified general aviation private pilots should complete the survey as soon as possible after the practical test. Results of the survey will be used to determine the need for additional DPE training and/or oversight, identify areas of concern so that the FAA may affect corrections in FAA policy, guidance material, and FAA-sponsored programs in order to improve the overall quality of flight training and testing.

### **METHOD**

Newly certified airplane single-engine land general aviation (GA) pilots across the United States will receive an anonymous and voluntary survey to complete and return by mail.

# **ASEL Survey**

The survey includes over 40 questions that ask pilots about their flight training and practical test experience. There are several questions about the pilot's experience with their independent flight instructor or pilot school. Respondents are asked for example: "In preparation for your practical test, did your flight instructor advise you that the pilot examiner would assess runway incursion avoidance?" Respondents are also asked about their examiner and their most recent practical test. For example, respondents would indicate yes or no to, "Did the examiner ask you to explain the maintenance logbook entries for the aircraft you used during the practical test?" Additionally, respondents indicate yes or not to which of the technical subject areas, maneuvers, and procedures the examiner required them to explain, demonstrate, or repeat. Although not exhaustive, some areas included: Preflight Procedures, Takeoffs, Landings, and Go-Arounds, Stalls, Maneuvers/Procedures in Simulated Instrument Conditions, and Emergency Operations. Respondents are also asked about specific critical maneuvers. For example, "On your most recent practical test, did you demonstrate a crosswind landing?"

#### **DPE Survey**

A Designated Pilot Examiner survey will be administered to all DPEs, of which there are approximately a thousand, across the United

States. Names, addresses, and respective FAA regions of each DPE were obtained from AFS-900.

The survey includes items that ask DPEs about their practical testing procedures and practices. DPEs are asked how many Private Pilot Airplane Single-Engine-Land (ASEL) practical tests they conducted during the past 12 months, the percentage of first-time Private Pilot ASEL applicants that perform unsatisfactorily during the flight portion of the practical test, and if they use a written plan of action (POA) when conducting a practical test for the Private Pilot ASEL rating.

Additionally, DPEs are asked about the current level of proficiency amongst their applicants. Specifically, they are asked how adequately instructors are preparing first-time Private Pilot ASEL applicants for the oral (ground) portion of the practical test.

The Civil Aerospace Medical Institute (CAMI) Aerospace Human Factors Division will mail all ASEL DPEs an anonymous and voluntary survey with a postage-paid return envelope. In an attempt to maximize response rates, the survey will have an attached cover letter explaining the purpose of the survey and asking for feedback regarding DPE examination practices. Respondents will be assured that the survey is completely anonymous and voluntary and that if any of the questions make them feel uncomfortable, they should skip them.

We wish to capture the opinions and attitudes of respondents soon after their practical test flight. Thus, it will be necessary to conduct multiple data collections because GA pilot certification testing occurs repeatedly throughout the year.

Returned surveys will be scanned into a database through the use of Teleform software. Summary reports for the surveys will be created for each region that has at least 8 respondents. In addition, an overall report will be created.

## RESULTS

Three thousand GA ASEL surveys and envelopes were printed and are ready for distribution. AFS-800 has asked the registry to assist with the ASEL survey project. The registry is to gather the pertinent names and addresses for the ASEL GA pilots and supply the addresses to CAMI personnel. However, there a few criteria that they cannot match with our original target population (e.g., region of respondent identified, first-time applicant with no failures in the past); therefore, the project is on hold waiting for direction from AFS-800.

## **REFERENCES**

General Accounting Office (2004). FAA needs to strengthen the management of its designee programs. GAO-05-40.